ADC PEDIATRIC SOFTWARE FOR UNIX

USER MANUAL

Features of the ADC Pediatric Software

The ADC Pediatric Software permits you to perform pediatric examinations with low radiation doses and optimized image quality. It has been developed for speed class 200/400 examinations compliant with the '*European Guidelines on Quality Criteria for Diagnostic Radiographic Images in Paediatrics*'.

The ADC Pediatric Software provides image processing parameters (MUSICA parameters) optimized for four age groups, covering all pediatric examinations.

Definition of age groups

The age groups for which optimized image processing parameters have been defined are listed below.

Age	Age group
0 - 1.5 yr	Premature babies/Babies
1.6 - 5 yr	Toddlers/Infants
6 - 12 yr	Schoolchildren
13 - 16 yr	Teenagers

You can identify the patient as belonging to a particular age group via the Radiologist field in the Identification screen of the ADC ID Software.

Caution

If your hospital is equipped with a Radiological Information System (RIS), your system administrator can develop an application which - based on the patient's birth date - automatically selects the appropriate age group in the Radiologist field.

Examination parameters

The development of the optimized image processing parameters (MUSICA parameters) was based on the following examination parameters.

Parameters for automatic examinations

Caution

The values listed below are only valid for examinations performed with a tube filter of 3.5 mm Al and 0.1 mm Cu.

Examination/ Sub-examination	With grid	Without grid	Speed class
	kV	kV	
Corpus			
Skull PA/ Skull LAT	67		400
Sinus	65		400
Spine LAT	60		400
Spine PA	65		400
Pelvis (6 m)		60	400
Pelvis	70		400
Thorax PA	90	68	400
Thorax LAT	110	73	400
Abdomen	68		400
Extremities			
Upper arm/ Upper leg	62	50	400
Hand/Foot		45	200

Parameters for manual examinations

Caution

The values listed below are only valid for examinations performed with a tube filter of 3.5 mm Al and 0.1 mm Cu.

Examination/ Sub-examination	6 m	2 yr	6 yr	12 yr	15 yr	Speed class
	kV - mAs	kV - mAs	kV - mAs	kV - mAs	kV - mAs	
Corpus						
Nose			55 - 1.2			400
Cavum			70 - 1.6	70 - 1.8		400
CWZ PA (grid)	90 - <1 at 1.3 ms		95 - <1 at 1.6 ms			400
CWZ LAT	70 - 1.2	70 - 1.4				400
Pelvis PA	60 - 5	70 - 6.4	70 - 8	70 - 16	70 - 40	400
Pelvis LAT					80 - 6.4	400
Thorax (small focus)			70 - 1.2	70 - 2	70 - 3.2	400
Abdomen				70 - 4		400
Skull (lateral exposure & grid)				65 - 5		400
Upper extremities						
Finger			50 - 3.2	50 - 5	50 - 5	200
Hand	50 - 5	50 - 7	50 - 8	50 - 8	50 - 8	200
Wrist		55 - 4/5	55 - 4/5	55 - 5.4	55 - 6.4	200
Wrist cast			60 - 6.4	60 - 10		
Lower arm		55 - 4/5	55 - 5.5	55 - 6.4/8	55 - 8/10	200
Lower arm cast			60 - 8/10	61 - 8/10	62 - 10/13	

Examination/ Sub-examination	6 m	2 yr	6 yr	12 yr	15 yr	Speed class
	kV - mAs	kV - mAs	kV - mAs	kV - mAs	kV - mAs	
Elbow		55 - 4	55 - 5	55 - 8	55 - 8/10	200
Elbow cast			60 - 8	60 - 10/13		
Upper arm	50 -	55 -	55 -	60 - 6.4	60 -	200
Upper arm cast				60 - 13		
Lower extremities						
Foot	50 - 5	50 - 5	50 - 6.4	50 - 8	50 - 8	200
Foot cast			55 - 8			
Ankle	55 - 5	55 - 6.4	55 - 8/10	56 - 8/10	57 - 10/13	200
Lower leg	55 - 6.4	55 - 8		55 - 10/13	56 - 10/13	200
Lower leg cast		60 - 8	60 - 8	60 - 16/20		
Knee	55 - 6.4		55 - 6.4/8	55 - 10/13	55 - 13	200
Upper leg		55 -	55 -	60 -	60 - 20	200
Upper leg cast		55 -13		60 - 16		

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